INSTALLATION OPERATION & SERVICE MANUAL

SINGLE CHANNEL RADIO RECEIVERS

Model: RC613, RC613L Switching Module

For indoor and outdoor use, suitable for Pool/Spa equipment control ELECTRICAL RATING: 15 A Resistive, 1200 W Tungsten, 1 HP Motor Load - 120 V

THIS DEVICE COMPLIES WITH FCC RULES PART 15. Operation of this device is subject to the following two conditions 1) This device may not cause harmful interference. 2) This device must accept any interference that may be received, including interference that may cause undesired operation. FCC rules prohibit adjustments to or modification of receiver and transmitter circuitry except for replacing the remote control battery. THERE ARE NO OTHER USER SERVICEABLE PARTS.

! WARNING Risk of Fire or Electric Shock

- Installation and/or wiring must be in accordance with national and local electrical code.
- Use COPPER conductors ONLY.
- The control panel to be a minimum of 3m (in Canada) or 5ft (in USA) from the inside wall of the pool, spa, or pond, unless separated from the body of water by a fence, wall or other permanent barrier that will make the unit inaccessible to persons in the water.
- Do NOT exceed maximum current carrying capacity.
- This enclosure does not provide grounding between conduit connections. When metallic conduit is used, you must also install grounding type bushings and jumper wire, in accordance with the (NEC) National Electrical Code requirements.
- This control should not be connected to any equipment which would cause bodily injury property damage should it be activated unexpectedly.
- Disconnect power at circuit breaker(s) or disconnect switch(es) before installing or servicing.
- Test GROUND FAULT protection regularly. If it fails to reset, DO NOT USE THE POOL or SPA! Contact a qualified service technician.

GENERAL INFORMATION

These Modular Radio Receivers are one half of a two part remote control system. They operate as ordinary ON/OFF switches but they also respond to the signals of a hand held transmitter - the other half of the system. The modules are designed for indoor or outdoor use, and can handle a variety of switching applications, typical around the house or farm. By the push of a button on the face of the transmitter, the user is able to turn ON/OFF the connected load (lights, pump, etc.) from any remote location*, safely and conveniently. In addition, a single transmitter can operate up to three Receivers and is able to "teach" each Module a different code. (Transmitters are sold separately).

Model RC613 Receiver Module comes with its own manual ON/OFF button and it is intended to be installed at the location of the load. The connected load may be turned ON/OFF using the hand-held transmitter or turned ON/OFF by pushing the red button on the face of the Receiver.

Model RC613L Receiver Module is the same as RC613 except that it comes with extra long (36 in.) leads.

ON/OFF

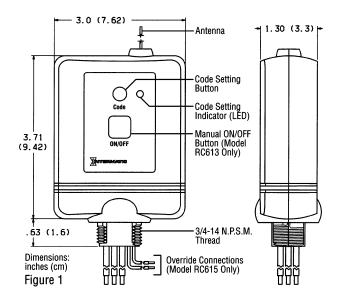
INTERNATIOS

^{*} The open field range is approximately 200 feet or less, but depends on many factors like the age of the battery, proximity of large metal objects, the location of the receiver and environmental conditions at the time of transmission.

SPECIFICATIONS AND OTHER INFORMATION

USEFUL INFORMATION

- 1. Must be mounted upright. Antenna must be up.
- 2. Radio Receivers are sensitive to heat. Avoid mounting them above heater, air conditioner or exposed to afternoon sun.
- 3. The higher the Receiver Module, the longer its range. For good range and reliable reception, install modules as high as practical above ground level with antenna at top.
- 4. Large metal objects divert radio signals. Avoid mounting Receiver Modules on metal wall, fence or near large metal objects.
- 5. Environmental conditions could effect the operation of the remote control system. For example, in rain the range may be less than normal.
- Certain electric equipment like brush type motors or electronic gas heater igniters emit radio signals and can effect the function of the Receiver Module. Avoid mounting modules near such equipment.
- 7. To prevent electronic interference, install Receiver Modules at least 3 feet apart.

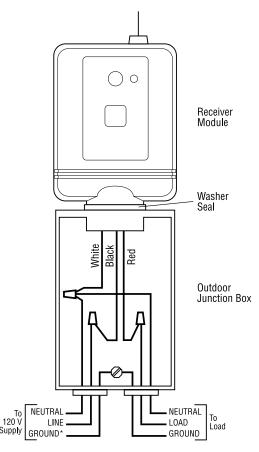


INSTALLATION

A. ON/OFF Switching Application - use Model RC613 or RC613L

Make sure the intended load is within the capacity of the Module, see ratings on page 1 and other choices on page 4.

- 1. Attach Receiver Module to the top of an outdoor grade junction box. Make sure the assembly is raintight.
- 2. Select the proper location (see Useful Information above) and install Receiver assembly on a vertical surface or other support, using hardware, suitable for the purpose.
- 3. Prepare the necessary conduit runs as required by the installation layout and pull-in the specified conductors.
- 4. Follow wiring diagram A on the right, make wire connections as shown.
- Turn ON power and test installation, using the ON/OFF button on face of the Receiver Module. Replace junction box cover, make sure the installation is secure and raintight.
- 6. To link transmitter button with the receiver, see Operating Instructions on page 3.



*Ground connections may or may not be as shown. **Diagram A**

OPERATION

Linking RC939 Transmitter Button with the RC613 Receiver

- 1. To clear any existing codes, press and hold the blue code set button on the receiver for 15 seconds then release.
- 2. Now insert a paper clip in the hole on the bottom right side of remote and get the red light on the bottom to light up. (NOTE: Illuminated LED may be difficult to see in direct sunlight.)
- 3. To link the reciever and transmitter, go back to the receiver and press & release the blue code set button.
- 4. Now choose the button on the remote you want it on and SLOWLY "press & release".
- 5. After the 7th time, you should hear the relay in the receiver click.
- Continue to SLOWLY press the remote button (relay should click every 4th time now).
- 7. Repeat until you hear the relay click 3 or 4 times.
- 8. Press one of the other 2 buttons on the remote to save the code.

Linking Multiple transmitters with a Receiver

Up to three different transmitters can control a receiver. Follow steps 1 through 4 of Linking each RC939 transmitter with the RC613 receiver.

LIST OF AVAILABLE MODELS AND COMPONENTS

Model	Description	Specifications	
RC613	Single Channel Receiver 3-way switching module	15 A Resistive, 10 A (1200 W) Tungsten, 1 HP (16 A FLA)	
RC613L	Single Channel Receiver with 36 in. Lead	15 A Resistive, 10 A (1200 W) Tungsten, 1 HP (16 A FLA), Single Pole Single Throw Contacts	
RC613R	Heavy-Duty Receiver and Relay Assembly	30 A Resistive - 120/240 V, 12.5 A (1500 W) Tungsten - 120 V, 1.5 HP - 120 V, 3 HP - 240 V, Double Pole Single Throw Contacts	
RC939	3 Channel Transmitter	Operates on 9 V Battery	

TROUBLESHOOTING

Symptom	Possible Cause(s)	Corrective Action
No response to transmitter signal at any time	No power	Turn ON power at main panel
	Loose connection(s) at receiver and/or load	Check connections
	Transmitter battery dead	Replace battery
	Receiver and transmitter are on 2 different codes	Link transmitter button with the receiver (see page 3, Operating instructions)
	Faulty transmitter	Check battery connections, replace transmitter
	Faulty receiver	Replace receiver module
No response to transmitter signal some times	Weak battery	Replace battery
	Appliance with brush type motor is in use	Relocate appliance and/or connect to another circuit
	Other radio transmitter (police, etc.) is operating nearby	Link transmitter button with the receiver (see page 3, Operating instructions)
	Receiver is at edge of range	Mount receiver closer or higher
Insufficient Range	Weak battery	Replace battery
	Antenna too close to ground	Relocate receiver module
	Transmitter is held too close to ground	Hold transmitter at least 3 ft above ground
	Weak signal due to obstruction	Remote/relocate receiver module
Nuisance operation	Other radio transmitter (police, etc.) is operating nearby	Link transmitter button with the receiver (see page 3, Operating instructions)
	Fluctuating supply voltage due to surge, etc.	If frequent, install surge suppressor
	Faulty receiver	Replace receiver module

LIMITED ONE-YEAR WARRANTY

If within the warranty period specified, this product fails due to a defect in material or workmanship, Intermatic Incorporated will repair or replace it, at its sole option, free of charge. This warranty is extended to the original household purchaser only and is not transferable. This warranty does not apply to: (a) damage to units caused by accident, dropping or abuse in handling, acts of God or any negligent use; (b) units which have been subject to unauthorized repair, opened, taken apart or otherwise modified; (c) units not used in accordance with instructions; (d) damages exceeding the cost of the product; (e) sealed lamps and/or lamp bulbs, LED's and batteries; (f) the finish on any portion of the product, such as surface and/or weathering, as this is considered normal wear and tear; (g) transit damage, initial installation costs, removal costs, or reinstallation costs.

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This warranty service is available by either (a) returning the product to the dealer from whom the unit was purchased or (b) completing a warranty claim online at www. intermatic.com. This warranty is made by: Intermatic Incorporated, Customer Service 7777 Winn Rd., Spring Grove, Illinois 60081-9698. For warranty service go to: http://www.Intermatic.com or call 815-675-7000.

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